

Profile information current as at 29/07/2024 03:49 pm

All details in this unit profile for ENEP29001 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit provides you with the opportunity to apply skills and knowledge developed in your academic course to engineering practice. This unit will also develop new engineering practice skills and knowledge. You will document and reflect on work activities and relate them to Engineers Australia's Stage 1 Competency Standards and develop a strategic approach to personal growth in the workplace. You are required to undertake a minimum of 300 hours of work placement, which may require relocation of accommodation to suit the placement. Students should contact the unit coordinator prior to enrolment in this unit to discuss placement requirements.

Details

Career Level: Postgraduate

Unit Level: Level 9 Credit Points: 12

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.25

Pre-requisites or Co-requisites

Pre-requisite: A GPA of 4.1 across 48 credit points in the first year of CV82 Master of Engineering course. Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 2 - 2024

- Melbourne
- Online
- Rockhampton

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 12-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 hours for the unit.

Class Timetable

Regional Campuses

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. Written Assessment

Weighting: 35%

2. Written Assessment

Weighting: 40% 3. **Portfolio** Weighting: 10% 4. **Presentation** Weighting: 15%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

- 1. Analyse the structure, products, and services of an engineering organisation
- 2. Apply skills and knowledge developed in the academic course to engineering practice in an engineering organisation
- 3. Demonstrate Engineers Australia Stage 1 Competencies through work activities
- 4. Reflect on and map Engineers Australia's Stage 1 Competency Standards to work activities
- 5. Develop a strategic approach to personal and professional growth in the workplace.

The Learning Outcomes for this unit are linked with the Engineers Australia Stage 1 Competency Standards for Professional Engineers in the areas of 1. Knowledge and Skill Base, 2. Engineering Application Ability and 3. Professional and Personal Attributes at the following levels:

Intermediate

- 1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline. (LO: 2I 3I)
- 1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences underpin the engineering discipline. (LO: 21 3I)
- 1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline. (LO: 21 31)
- 1.4 Discernment of knowledge development and research directions within the engineering discipline. (LO: 2N 3I)
- 1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline. (LO: 1N 3I)
- 1.6 Understanding the scope, principles, norms, accountabilities, and bounds of sustainable engineering practice in the specific discipline. (LO: 3I)
- 2.1 Application of established engineering methods to complex engineering problem-solving. (LO: 2I 3I 5I)
- 2.3 Application of systematic engineering synthesis and design processes. (LO: 21 31)
- 3.2 Effective oral and written communication in professional and lay domains. (LO: 3I 4I 5I)
- 3.3 Creative, innovative, and proactive demeanour, (LO: 1N 3I)
- 3.4 Professional use and management of information. (LO: 11 3I 4I)
- 3.5 Orderly management of self, and professional conduct. (LO: 3I 5I)
- 3.6 Effective team membership and team leadership. (LO: 11 31)

Advanced

- 2.2 Fluent application of engineering techniques, tools, and resources. (LO: 2A 3I 5I)
- 2.4 Application of systematic approaches to the conduct and management of engineering projects. (LO: 2A 3I)
- 3.1 Ethical conduct and professional accountability. (LO: 3A 4I 5I)

Note: LO refers to the Learning Outcome number(s) which link to the competency and the levels: N - Introductory, I - Intermediate, and A - Advanced.

Refer to the Engineering Postgraduate Units Moodle site for further information on the Engineers Australia's Stage 1 Competency Standard for Professional Engineers and course level mapping information https://moodle.cgu.edu.au/course/view.php?id=11382

Alignment of Learning Outcomes, Assessment and Graduate Attributes Introductory Intermediate Graduate Professional Advanced Level Level Level Level Level Level Alignment of Assessment Tasks to Learning Outcomes **Assessment Tasks Learning Outcomes** 2 3 4 5 1 - Knowledge 2 - Communication 3 - Cognitive, technical and creative skills 4 - Research 5 - Self-management 6 - Ethical and Professional Responsibility 7 - Leadership 8 - Aboriginal and Torres Strait Islander Cultures

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: <u>Harvard (author-date)</u> For further information, see the Assessment Tasks.

Teaching Contacts

Sarkar Noor E Khuda Unit Coordinator s.noorekhuda@cqu.edu.au Kalam Azad Unit Coordinator a.k.azad@cqu.edu.au

Schedule

Week 1 - 08 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
•	Chapter	Events and Submissions/Topic
Commence development of work placement objectives and descriptions. Commence work placement and document your activities in your weekly journals.		Attend the host organisation
Week 2 - 15 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue development of work placement objectives and descriptions. Continue work placement and document your activities in your weekly journals.		Attend the host organisation
Week 3 - 22 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Complete work placement objectives and planning descriptions. Continue work placement and document your activities in your weekly journals.		Attend the host organisation
Week 4 - 29 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue work placement and document your activities in your weekly journals. Commence development of Assignment 1: application of engineering knowledge in the workplace.		Attend the host organisation
Week 5 - 05 Aug 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue work placement and document your activities in your weekly journals. Collate pictorial evidence of applications of engineering knowledge in the workplace from your activities and weekly journals.		Attend the host organisation
Vacation Week - 12 Aug 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue work placement and document your activities in your weekly journals. Complete Assignment 1: application of engineering knowledge in the workplace.		Attend the host organisation This is not a vacation week at your host organisation. Please attend the host organisation. APPLICATION OF ENGINEERING KNOWLEDGE IN WORKPLACE Due: Vacation Week Monday (12 Aug 2024) 10:00 pm AEST
Week 6 - 19 Aug 2024		
Module/Topic	Chapter	Events and Submissions/Topic
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Continue work placement and document your activities in your weekly journals. Attend the host organisation Formulate the narrative for your professional engineering project report. Week 7 - 26 Aug 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and document your activities in your weekly journals. Attend the host organisation Commence development of Assignment 2: professional engineering project report. Week 8 - 02 Sep 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and Attend the host organisation document your activities in your **PROFESSIONAL ENGINEERING** weekly journals. Complete Assignment 2: professional **PROJECT REPORT** Due: Week 8 engineering project report. Monday (2 Sept 2024) 10:00 pm AEST Week 9 - 09 Sep 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and document your activities in your weekly journals. Revise and update your professional Attend the host organisation Commence development of selfassessment and reflection against the EA' Stage 1 Competencies. Collate necessary documents and paperwork for the internship portfolio Week 10 - 16 Sep 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and document your activities in your weekly journals. Attend the host organisation Continue work placement and **PORTFOLIO** Due: Week 10 Monday document your activities in your (16 Sept 2024) 10:00 pm AEST weekly journals.. Complete the internship portfolio. Week 11 - 23 Sep 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and document your activities in your weekly journals. Attend the host organisation Collate necessary documents and work on internship video presentation. Week 12 - 30 Sep 2024 Module/Topic Chapter **Events and Submissions/Topic** Continue work placement and Attend the host organisation document your activities in your PRESENTATION Due: Week 12 weekly journals. Complete your internship video Monday (30 Sept 2024) 10:00 pm presentation. **AEST**

Review/Exam Week - 07 Oct 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue work placement and document your activities in your weekly journals.		Attend the host organisation
Exam Week - 14 Oct 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Continue work placement and document your activities in your weekly journals.		Attend the host organisation

Term Specific Information

Check all assessment details, including assignment templates and marking criteria available on the unit Moodle website.

Assessment Tasks

1 APPLICATION OF ENGINEERING KNOWLEDGE IN WORKPLACE

Assessment Type

Written Assessment

Task Description

Provide pictorial evidence of the engineering, technical and nontechnical activities performed during your internship placement, and present this evidence in a detailed, formal engineering report format. The report will enable you to reflect on the actions/decisions made during the internship placement and allow you to demonstrate how you expanded your knowledge, maintained up-to-date technical skills and progressed your engineering career.

Assessment Due Date

Vacation Week Monday (12 Aug 2024) 10:00 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted mark. Extension requests greater than 14 days will be denied except under exceptional circumstances. Any extension request submitted on the day of submission will be denied. All extension reques should be submitted through Moodle.

Return Date to Students

Marked report will be returned within 2 weeks of submission

Weighting

35%

Minimum mark or grade

50%

Assessment Criteria

Your report should include, pictorial evidence of the engineering activities you performed at the internship. Include a short paragraph/note to describe each of the images/figures/outcomes you provided. Detailed marking criteria for this assessment item can be found on the ENEP29001 Moodle site. The marking criteria sheet guides the type of evidence required for each level of achievement. You must review the criteria sheet before commencing your internship placement at the host organisation, so you are familiar with the evidence you need to collect throughout the placement.

Any photo and other confidential information about the company must be accompanied by written permission from the hosting company.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Report must be completed using the provided report template and submitted before the deadline.

Learning Outcomes Assessed

- Analyse the structure, products, and services of an engineering organisation
- Apply skills and knowledge developed in the academic course to engineering practice in an engineering organisation
- Demonstrate Engineers Australia Stage 1 Competencies through work activities

2 PROFESSIONAL ENGINEERING PROJECT REPORT

Assessment Type

Written Assessment

Task Description

Describe at least one professional engineering project you completed while at the host organisation. The report should show how your contribution to the project aligns with all 16 of the Engineers Australia Stage-1 competencies and cover all 16 components as mentioned in the Summary of Table of Competencies. You will be required to demonstrate how you applied/linked the theoretical engineering knowledge with real-world engineering practices

Assessment Due Date

Week 8 Monday (2 Sept 2024) 10:00 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted mark. Extension requests greater than 14 days will be denied except under exceptional circumstances. Any extension request submitted on the day of submission will be denied. All extension reques should be submitted through Moodle.

Return Date to Students

Marked report will be returned within 2 weeks of submission

Weighting

40%

Minimum mark or grade

50%

Assessment Criteria

You will be required to demonstrate the engineering, technical and nontechnical activities you performed in this project, as well as your personal and professional developments and achievements in terms of the improvement in your communication, organisational and time management skills. In this report, you must comprehensively describe the actual work you performed. You should state what you did and then describe how you did it. Note, that it is not sufficient to describe the activities performed by a team/group, your own role/actions must be clearly mentioned. Remember, your personal engineering competencies during the internship are being assessed not the internship host organisation you worked for or the complexity of the project. A detailed report writing guideline and marking criteria of the project report can be found on the ENEP29001 Moodle site. The marking criteria sheet gives guidance regarding the type of evidence required for each level of achievement. It is important that you review the criteria sheet through your internship placement, so you are familiar with the evidence you need to collect.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Report must be completed using the provided report template and submitted before the deadline.

Learning Outcomes Assessed

- Apply skills and knowledge developed in the academic course to engineering practice in an engineering organisation
- Demonstrate Engineers Australia Stage 1 Competencies through work activities
- Develop a strategic approach to personal and professional growth in the workplace.

3 PORTFOLIO

Assessment Type

Portfolio

Task Description

The Portfolio gives you the opportunity to demonstrate what you have learnt in this internship program. The portfolio should include all the component items and follow the sequence mentioned below:

- Portfolio cover page
- Executive summary
- Submission checklist
- Table of contents
- List of figures
- Weekly log hours and work progress report
- Summary of the table of competencies
- Appendix A: Application of engineering knowledge in the workplace
- Appendix B: Professional engineering project report
- Appendix C: Up-to-date curriculum vitae
- Appendix D: Internship Certificate and Signed Logbook
- A declaration stating that the content of this portfolio is your own work and you are aware of the University and faculty policy on plagiarism.

All components of the portfolio must be written (typed) in English using Times New Roman font (size 12), in your own words and will act as evidence of your communication skills. Each assessment item within the portfolio must clearly demonstrate your ability to apply engineering knowledge and skills. State what you did and describe how you did it. Emphasize your role and your contribution to the project (for example I designed, I checked, I investigated etc.). Each component should discuss the engineering problems you identified and/or particular problem-solving techniques you applied. The purpose of this is to assess your personal contribution to meeting project goals.

Assessment Due Date

Week 10 Monday (16 Sept 2024) 10:00 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted mark. Extension requests greater than 14 days will be denied except under exceptional circumstances. Any extension request submitted on the day of submission will be denied. All extension reques should be submitted through Moodle.

Return Date to Students

Marked report will be returned within 2 weeks of submission

Weighting

10%

Minimum mark or grade

50%

Assessment Criteria

You must provide evidence of your achievement of each of the unit learning outcomes, required log hours and internship certificate from the host organisation. There is a marking criteria sheet for this portfolio available on the ENEP29001 Moodle site. The criteria sheet gives guidance regarding the type of evidence required for each level of achievement. It is important that you carefully review the criteria sheet before compiling your portfolio. There are minimum requirements for the Portfolio and you must provide evidence of achieving the minimum requirements in order to be eligible for a passing grade for this assessment.

Any photo and other confidential information about the company must be accompanied by written permission from the hosting company.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Portfolio must be completed using the provided portfolio template and submitted before the deadline.

Learning Outcomes Assessed

• Reflect on and map Engineers Australia's Stage 1 Competency Standards to work activities

4 PRESENTATION

Assessment Type

Presentation

Task Description

The professional engineering presentation will provide you with the scope to demonstrate the skills you developed in the particular engineering field through the internship program. It will also enable you to demonstrate your ability to communicate with team members and clients in a professional manner.

Assessment Due Date

Week 12 Monday (30 Sept 2024) 10:00 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted mark. Extension requests greater than 14 days will be denied except under exceptional circumstances. Any extension request submitted on the day of submission will be denied. All extension reques should be submitted through Moodle.

Return Date to Students

Mark of presentation will be available to students after grade certification.

Weighting

15%

Minimum mark or grade

50%

Assessment Criteria

- Appropriateness of presentation
- Explanation of the contents
- Preparation and consistency of presentation
- Set up and use of visual aids, including PowerPoint slides
- Duration of presentation
- Answer any questions appropriately

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Presentation video or link to online video and PPT file must be submitted before the due date and time.

Learning Outcomes Assessed

- Analyse the structure, products, and services of an engineering organisation
- Develop a strategic approach to personal and professional growth in the workplace.

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem